

PURCHASE PLAN CHECKLIST

Highway Design Manual

Appendix 10-8

Supersedes: June 2, 2010

Revision Date: April 22, 2014

PROJECT: _____

***The plans shall be legible and have no obscured annotations for all proposed and existing detail.
See also Chapter 10 of the Highway Design Manual (HDM) for additional guidance.***

I. RIGHT-OF-WAY FRONT SHEET

A. Location Map (Included)

	Done By/Date	Checked By/Date	Comments
1 Project location designated with a circle			
2 State project number attached to circle			
3 North arrow			
4 Major roads, rivers, brooks, streams, lakes, etc. labeled			
5 Town, city, county, country & state names labeled with boundaries			
6 Railroads (RR) labeled			
7 Leaders of location map box extend to the project location on the State of NH outline			
8 Graphic scale			

B. Layout (Included)

1 Legacy Alignment(s) stationed every 500 feet *			
2 Road names			
3 Existing buildings (solid), roadway edge of pavement (EP), drive EPs, curbing, bridges (with bridge numbers), railroads, rivers, streams, brooks, and lakes shown			
4 Existing town/city, county & state boundaries shown and labeled			
5 "To (Town or City)" at all ends of the project with destination arrows			
6 Show water course flow arrows			
7 Limit of ROW with stations that match the ROW plan sheets (use the Legacy Alignment**)			
8 North arrow (grid)			
9 Town/City of () - include only those towns/cities affected			
10 County of () - include only those counties affected			
11 Scale (i.e. 1" = XXX')			

C. Miscellaneous (Included)

1 Right-Of-Way Front Sheet Notes filled out completely			
2 Project name with Federal & State numbers			
3 Road name in sheet title			
4 Title block completed with project number, sheet numbers and signature block with appropriate signature blanks***			
5 Licensed Land Surveyor Stamp, signature, and date			
6 In border, "DRAWN BY" and "CHECKED BY" with dates			
7 Index of sheets completed, do not include x-sections in summary			
8 Note "FOR CONSTRUCTION DETAILS - SEE CONSTRUCTION PLANS"			
9 Do not include the Design Data block			
10 Stamped "PRELIMINARY PLANS SUBJECT TO CHANGE" without the date, if not the final set of purchase plans			
11 Stamped "PRELIMINARY ROW PLANS", "ROW PLANS" or "REVISED ROW PURCHASE PLANS #X" with a date			

* Construction Alignments will only be required on the Geometric Layout Sheets. If a project does not have a Legacy Alignment, the Construction Baseline will be used as the Legacy alignment in the following checklist.

** Verify the alignment to be used with the ROW Engineer prior to finalizing or flagging.

*** If Town or City funding is involved, the Municipal Highway Engineer will sign the Front Sheet.

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II. SYMBOLS SHEETS

		Done By/Date	Checked By/Date	Comments
1	Latest revision date verified (should match those in Construction Plans)			
2	The border should not contain a block for "NEW DESIGN" or "SHEET CHECKED BY"			
3	Sheet title block filled in completely with project number, sheet number, and total sheets			
4	Stamped "PRELIMINARY PLANS SUBJECT TO CHANGE" without the date if not the final set of purchase plans			
5	Stamped "PRELIMINARY ROW PLANS", "ROW PLANS" or "REVISED ROW PURCHASE PLANS #X" with a date			

III. RIGHT-OF-WAY SUMMARY SHEET(S)

A. Table of Property Acquisitions

1	"Parcel No." column filled in			
2	"Sheet No." column filled in with the sheet number from the title block of each sheet the parcel appears on			
3	"Property Owner" column filled in with the EXACT names shown on the 12345ERT.dgn as provided by the Bureau of ROW			
4	"Total Area of Parcel" column filled in with the EXACT area shown on the 12345ERT.dgn as provided by the Bureau of ROW			
5	"Take" column filled in with the area acquired (see VII.F.9 under Takes and Easements below)			
6	"Remainder Left/Right" columns filled in with acres			
7	"Permanent Easement" columns filled in with the appropriate area and type			
8	"Temporary Easement" columns filled in with the appropriate area, type and expiration date			
9	"CAROW Points of Access LT/RT" column filled in, if applicable			
10	"Remarks" column filled in to describe unique features that may not be evident on the plans			
11	Note on bottom of summary table "DURATION OF TEMPORARY EASEMENTS WILL BE FOR XX MONTHS: BEGINNING WITH THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES."			

B. Table of Revisions - used only after the original ROW plans

1	"Revision No." column filled in once for each revision			
2	"Date" column filled in with the ROW revision date			
3	"Sheet No." column filled in to match the Table of Property Acquisitions			
4	"Description" column filled in listing each Parcel affected for that submission and the change, list each parcel separately			

C. Miscellaneous

1	Sheet title block filled in completely with road/route name, "RIGHT-OF-WAY SUMMARY SHEET", "TOWN/CITY OF ..." and "COUNTY OF...", project number, sheet number, total sheets, and model name (if used)			
2	Stamped "PRELIMINARY PLANS SUBJECT TO CHANGE" without the date if not the final set of purchase plans			
3	Stamped "PRELIMINARY ROW PLANS", "ROW PLANS" or "REVISED ROW PURCHASE PLANS #X" with a date			

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IV. RIGHT-OF-WAY PROPERTY LAYOUT SHEET(S)

A. Parcel Owner Table

		Done By/Date	Checked By/Date	Comments
1	Filled in with parcel numbers, sheet, property owners and CAROW Points of Access that match the 12345ERT.dgn and 12345prw.dgn EXACTLY			

B. Plan

1	Legacy Alignment(s) stationed every 500 feet			
2	Route numbers and/or names of roads and railroads			
3	Match lines (if appropriate)			
4	North arrow (grid)			
5	Town/city, county, country and state boundaries shown and labeled			
6	Property lines and Z lines (without owner name labels) showing full property boundaries, including the back lines (if coverage allows)			
7	Edge of pavement, edge of drives, retaining walls and fences			
8	Buildings (solid), lakes, rivers, streams, brooks, etc., bridges (with bridge numbers)			
9	Parcel numbers (as shown on 12345ERT.dgn) without Parcel Names			
10	Existing and proposed ROW without labels			
11	Existing easements without labels			
12	Limit of ROW with stations that match the ROW plan sheets			
13	Approximate scale shown			
14	Aerial photograph attached, change all text, symbols, etc. which are over the aerial to white			

C. Miscellaneous

1	"NOTE: PLAN SHALL NOT BE CONSTRUED AS A BOUNDARY SURVEY"			
2	In border, "DRAWN BY" and "CHECKED BY" with dates			
3	Sheet title block filled in completely with road/route name, "RIGHT-OF-WAY PROPERTY LAYOUT", "TOWN/CITY OF ..." and "COUNTY OF...", project number, sheet number, total sheets, and model name (if used)			
4	Stamped "PRELIMINARY PLANS SUBJECT TO CHANGE" without the date if not the final set of purchase plans			
5	Stamped "PRELIMINARY ROW PLANS", "ROW PLANS" or "REVISED ROW PURCHASE PLANS #X" with a date			

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V. RIGHT-OF-WAY GEOMETRIC LAYOUT SHEET - PROPOSED ALIGNMENTS

If the project/alignment is:

- ***less complicated and there is no legacy alignment, geometric layout sheets may not be required.***
- ***less complicated and there is a legacy alignment, only one geometric layout sheet(s) (legacy alignment) may be required.***
- ***more complicated and there is no legacy alignment, only one geometric layout sheets (proposed alignment) may be required.***
- ***more complicated and there is a legacy alignment, two geometric layout sheets (legacy and proposed alignment) may be required.***

*** Contact the ROW Engineer if additional clarification is required.**

**** Construction Base line(s) will only appear on the geometric layout sheet. All information relative to the Construction base line(s) should be a lighter, italicized line style or font (see the CAD/D Documentation).**

A. <u>Plan</u>		Done By/Date	Checked By/Date	Comments
1	Construction Base Line(s) stationed every 500 feet, no detour alignments			
	a. Construction alignment curve control points shown and labeled (PC, PT, etc.)			
	b. Construction alignment curve data with PI coordinates in a table, use a separate sheet if necessary			
	c. Construction bearings			
	d. Construction equations			
2	Equations tying the legacy alignment to the construction alignment			
3	Route numbers and/or names of roads			
4	Limit of ROW with stations that match the ROW plan sheets			
5	Begin and End Construction with stations that match the Construction plan sheets			
6	Limit of Work with stations that match the ROW plan sheets			
7	Town/city, county, country and state boundaries shown and labeled			
8	Match lines (if appropriate)			
9	North arrow (grid)			
10	Exclude all existing and proposed detail			
11	Exclude all property information (property lines, owner names, parcel numbers, etc.)			
12	Exclude all ROW information (existing and proposed ROW, easements, etc.)			
13	Approximate scale			

B. Miscellaneous

1	Sheet title block filled in completely with road/route name, "RIGHT-OF-WAY GEOMETRIC LAYOUT SHEET", "TOWN/CITY OF ..." and "COUNTY OF...", project number, sheet number, total sheets, and model name (if			
2	"NOTE: PLAN SHALL NOT BE CONSTRUED AS A BOUNDARY SURVEY"			
3	In border, "DRAWN BY" and "CHECKED BY" with dates			
4	Stamped "PRELIMINARY PLANS SUBJECT TO CHANGE" without the date if not the final set of purchase plans			
5	Stamped "PRELIMINARY ROW PLANS", "ROW PLANS" or "REVISED ROW PURCHASE PLANS #X" with a date			

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VI. RIGHT-OF-WAY GEOMETRIC LAYOUT SHEET - LEGACY ALIGNMENTS

A. Plan

		Done By/Date	Checked By/Date	Comments
1	Legacy Base Line(s) stationed every 500 feet, include:			
	a. Legacy alignment curve control points shown and labeled (PC, PT, etc.)			
	b. Legacy alignment curve data with PI coordinates in a table, use a separate sheet if necessary			
	c. Legacy bearings			
	d. Legacy equations			
2	Equations tying the legacy alignment to the construction alignment			
3	Route numbers and/or names of roads			
4	Limit of ROW with stations that match the ROW plan sheets			
5	Begin and End Construction with stations that match the ROW plan sheets			
6	Limit of Work with stations that match the ROW plan sheets			
7	Town/city, county, country and state boundaries shown and labeled			
8	Match lines (if appropriate)			
9	North arrow (grid)			
10	Exclude all existing and proposed detail			
11	Exclude all property information (property lines, owner names, parcel numbers, etc.)			
12	Exclude all ROW information (existing and proposed ROW, easements, etc.)			
13	Approximate scale shown			

B. Miscellaneous

1	Sheet title block filled in completely with road/route name, "RIGHT-OF-WAY GEOMETRIC LAYOUT SHEET", "TOWN/CITY OF ..." and "COUNTY OF...", project number, sheet number, total sheets, and model name (if used)			
2	Note: "PLAN SHALL NOT BE CONSTRUED AS A BOUNDARY SURVEY"			
3	In border, "DRAWN BY" and "CHECKED BY" with dates			
4	Stamped "PRELIMINARY PLANS SUBJECT TO CHANGE" without the date if not the final set of purchase plans			
5	Stamped "PRELIMINARY ROW PLANS", "ROW PLANS" or "REVISED ROW PURCHASE PLANS #X" with a date			

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VII. RIGHT-OF-WAY PLAN SHEET(S)

* The intent is to use the ROW Purchase Plans as the base for creating the Registry Plan Set. Miscellaneous detail will be turned OFF as necessary to meet the PLAT Law.

A. <u>Miscellaneous</u>		Done By/Date	Checked By/Date	Comments
1	North arrow (grid)			
2	Graphic scale			
3	Provide match lines from sheet to sheet (e.g. Match to ROWSH05)			
4	Sheet title block filled in completely with road/route name, "RIGHT-OF-WAY PLANS", "TOWN/CITY OF ..." and "COUNTY OF...", project number, sheet number, total sheets, and model name (if used)			
5	Limits of ROW with stations to the next largest 5 ft			
6	In border, "NEW DESIGN" and "SHEET CHECKED" with dates			
7	Stamped "PRELIMINARY PLANS SUBJECT TO CHANGE" with the date if not the final set of purchase plans			
8	Stamped "PRELIMINARY ROW PLANS", "ROW PLANS" or "REVISED ROW PURCHASE PLANS #X" with a date			

B. Existing Detail (Included) (If plans are too crowded, See IX.3.d.)

1	Legacy Alignment(s) - include 100' stationing with 50' ticks, PC, PT and curve data (even if there is a geometric layout sheet)			
2	Parcel numbers and owners' name (as shown on the 12345ERT.dgn) shown on each sheet the parcel appears on			
3	Tax map & lot number for each parcel on each sheet the parcel appears on			
4	Book & page and area for each parcel on each sheet the parcel appears on			
5	Abstracting and existing easement notes			
6	ROW lines and property lines			
7	Existing ROW: label existing ROW appropriately on all cut sheets (label on inside of ROW) in the event of CAROW include the number of points of access and the project they were acquired under			
8	Existing ROW transition points with arrows			
9	Existing easements with labels and notes			
10	Town/city, county, country and state boundaries shown and labeled			
11	Buildings with descriptions (if available)			
12	Retaining walls at or near the ROW limits (exclude annotation)			
13	Iron pins, bounds and markers			
14	Woods lines, trees and stumps (include annotation)			
15	Fence lines and stonewalls (include annotation)			
16	EPs, TWs, curb, signs (with annotation) and lamp posts			
17	Geodetic disks			
18	Bridge deck limits, abutments and wings			
19	Streams, shorelines, brooks, and rivers with flow arrows and names			
20	RR Tracks			
21	Existing underground utilities and poles (include annotation)			
22	Delineated wetlands, OHW, TOB, etc. (without descriptions or triangles)			
23	Existing guardrail (exclude annotation)			
24	Existing drainage (include annotation and flow arrows)			

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C. Existing Detail (**Excluded**)

		Done By/Date	Checked By/Date	Comments
1	Exclude miscellaneous text such as curb, guardrail and sidewalk types			
2	Exclude property owner's name adjacent to property lines			
3	Exclude traverse points			
4	Exclude invasive species			
5	Exclude shoreland protection lines (WB50, NWB150, PS250)			

D. Proposed Detail (**Included**)

1	Proposed ROW: Label ROW, LAROW or CAROW on all cut sheets (label on inside of ROW.) Flag changes in ROW (See Section H - Flagging)			
2	Proposed bounds with station and offset (flagged off the Legacy Alignment)			
3	Proposed flagging (permanent easements and transitions in ROW)			
4	Projects with proposed CAROW note under the property owner's name, the number of access points granted even if it is zero, check the Report of the Commissioner for points of access granted, or other agreements			
5	All ROW concentric or parallel to and referenced from the legacy alignment at a hundredth of a foot offset (if practical)			
6	If radius of ROW is not concentric with the legacy alignment, label the ROW line with the radius, length and delta			
7	Proposed slope lines with labels			
8	Proposed clearing lines with labels			
9	Proposed EPs			
10	Proposed bridge deck limits, abutments and wings			
11	Limits of proposed driveway improvements (with driveway line)			
12	Proposed fences, pedestrian rail, and bike rail			
13	Detour alignments (do not include curve data or bearings)			
14	Proposed utilities (with flagging if available)			
15	Proposed guardrail			
16	Proposed drainage (pipes, end sections, and stone fill):			
	a. Closed drainage systems with flow arrows and outlet pipe sizes			
	b. Culverts, labeled with flow arrows and pipe sizes			
	c. Stone protection areas			
	d. Erosion control treatment and water quality treatment labeled			
17	Proposed curbing and sidewalks with back curb noted			
18	Proposed curbed islands - label the type of curb and island treatment (grass, concrete, bituminous, etc.)			
19	Proposed retaining walls			
20	Proposed signals, signs (including overhead), mast arms (exclude annotation)			
21	Add notes to loam and seed pavement removal areas			
22	ROW notes ("SAVE TREE", "DO NOT IMPACT...", "ATTENTION ROW: TO BE RELOCATED BY OTHERS", etc.)			

E. Proposed Detail (**Excluded**)

1	Exclude construction notes (drainage, guardrail, driveway, etc.)			
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F. <u>Easements, Impact areas and Take areas</u>		Done By/Date	Checked By/Date	Comments
1	Flag only permanent easements, other than slope easements, with station and offset. Do <u>not</u> flag temporary easements. (See Section H.- Flagging)			
2	Include all cross-hatching/dotted fill pattern:			
	a. Drainage/Channel/Erosion Control or Water Quality easements - dotted fill pattern			
	b. Temporary easement (no shading), label all easements once per parcel			
	c. Limits of other easements - solid, bold line (labeled) no shading			
	d. Takes - hatched with alternating patterns for each adjacent property owner			
	e. Outline large take areas with cross hatching approximately 5/16" (8 mm) wide. Crosshatch small take areas entirely			
	f. Structure removal with bold line style (45 degrees)			
3	Proposed driveway work: show a dashed line across the driveway to differentiate the slope easement and temporary drive easement beyond the ROW. (See Chapter 10 Figure 10-9)			
4	In areas of shallow cuts or fills with 4:1 and 6:1 slopes temporary slope easements may be appropriate instead of permanent easements, verify with ROW Engineer			
5	Pay particular attention to easements in areas with high real estate values, may use ft ² vs. Acres			
6	Make sure all TCP involvement is covered by a separate temporary easement, even if it is inside another easement			
7	Consider and include signing, signal and utility easement/acquisition requirements			
8	Calculate slope easements to the clearing line (include connecting lines from the slope line to the clearing line)			
9	Areas of takes, remainders and easements will be computed by the Lead Bureau. (Round takes to 0.01 Acre to the next higher 0.01 Acres. If less than 0.01 Acre or in urban areas, show takes and all easements in ft ²). Round all easements and takes under 0.01 Acres to the next higher 25 ft ² .			
10	Try to eliminate small takes and easements by adjusting slopes unless already dealing with the property owner			

G. ROW Bounds

NOTE:

- Round stations and offsets to nearest 0.01 ft.
- All bounds should reference the legacy alignment.

1	Place bounds on even stations and offsets whenever practical			
2	Place bounds at all PC, PT, Spiral Curve points and angle points on the ROW			
3	Limit placement of bounds to a maximum of 1000 feet			
4	Do not place bounds where ROW intersects property lines			
5	Place bounds at intersection of proposed/existing ROW unless the Proposed ROW terminates at a property line			
6	Bounds set in driveways, parking lots, etc. shall be set flush with the pavement. Every effort should be made to move bounds from driveways, parking lots, etc.			
7	Use stone bounds for Town and City Right-Of-Way			
8	Flagging is necessary for the existing ROW bounds to remain in place at the completion of the project			

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H. Flagging

NOTE:

- Round stations and offsets to nearest 0.01 ft.
- All flagging should reference the legacy alignment.

1	Flag station and offset at transition from one type of ROW to another			
2	Flag station and offset at intersection of permanent easements with ROW lines (existing or proposed), and changes in offset of existing ROW line			
3	Flag where the existing and proposed ROW intersect			
4	Flag existing bounds, iron pins, drill holes, etc.			
5	Do not flag property lines			

I. Summaries

1	Show sheet summary on each plan as follows (example shown below)			
2	Place impacts in the table on the first sheet the parcel appears on			

[illegible]

VIII. CROSS SECTIONS

- A. Cross sections are separate from the plan set. They are provided for use by the Bureau of ROW.

IX. PLAN SETS

A. Submissions

1	Plans will be stapled, stamped and labeled, on each end of each roll with a project name and number, "PRELIMINARY PLANS SUBJECT TO CHANGE (with a date)" and the type of plans "PRELIMINARY ROW PLANS", "ROW PLANS", or "REVISED ROW PURCHASE PLANS #X (with a date)".
2	Supervisors will meet with the Bureau of ROW (and provide a draft ROW submission) to review the preliminary ROW plans prior to the first formal submission.
3	The formal submission requires a memorandum to be forwarded from the Section Chief to the ROW Engineer, see the HDM Chapter 10 Appendix 10-1 for a sample. Retain one (1) set of ROW plans labeled "OFFICE COPY" in the tub. Include the following with the memo to ROW:
	a. One (1) set of full scale DRAFT Registry ROW Plans (first ROW submission only)
	b. Seven (7) sets of full scale ROW Plans.
	c. Seven (7) sets of 1/2-scale ROW Plans.
	d. Three (3) sets of full scale Cross Sections.
	e. Two (2) sets of full scale Existing Detail Plans. *
	f. One (1) photocopy of the applicable portion of the Table of Revisions, stapled to the memo
4	ROW Plans are to be placed in the tub separate from the Construction plans, do not discard previous formal submissions.
5	Final ROW plans for Records Section will be Mylar.
6	File, in the pigeon hole, all office copies of ROW Plan submissions together in one roll with the latest revision on the top when unrolled.
7	When highways are reclassified and returned to the Town, See the Highway Design Manual Chapter 10 for explicit instructions for reclassification.
8	Type of ROW plans (Full or Abbreviated, see below for requirements) to be determined at the Project Turnover Meeting to Final Design.

* These are only required if the plans are too crowded to be useful, or legible for the ROW Agent. In this case, create the detail plans with the existing detail and applicable text and remove it from the ROW plans. The existing detail plans are intended to be solely existing detail and an alignment, therefore these plans will only be required for the first submission unless there is a change in alignment, change in existing ROW location or additional survey is acquired.

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B. Sheets required, to be placed in the following order:

		ROW PLANS	ABBREVIATED ROW PLANS
1	Front Sheet	X	X
2	Symbols Sheets	X	X
3	Summary Sheets	X	
4	Property Layout Sheets	X	
5	Geometric Layout Sheets	X*	X*
6	ROW Plans	X	X
7	Cross Sections submitted under separate cover	X	X**
8	Existing Detail Plans (if required, see previous page)	X	X

* If the project/alignment is less complicated and there is no legacy alignment, geometric layout sheets may not be required.

If the project/alignment is less complicated and there is a legacy alignment, only one geometric layout sheet (legacy alignment) may be required.

If the project/alignment is more complicated and there is no legacy alignment, only one geometric layout sheet (proposed alignment) may be required.

If the project/alignment is more complicated and there is a legacy alignment, two geometric layout sheets (legacy and proposed alignment) may be required.

** Only in the area of the impacts